

CLAIMS

What is claimed is:

1. A laser markable tape for marking a semiconductor device comprising:
a tape comprising a flexible film material; and
a multi-layer adhesive including:
a first outermost adhesive layer comprising a mixture of electro-magnetic radiation-curable components, said electro-magnetic radiation-curable components providing a laser markable surface upon exposure to an electro-magnetic radiation source; and
a second adhesive layer disposed between said tape and said first outermost adhesive layer.
2. The laser markable tape of claim 1, wherein said laser markable tape is adhered to at least a portion of a surface of a bare semiconductor die.
3. The laser markable tape of claim 2, wherein said laser markable tape is adhered to a bare semiconductor die surface subjected to a backgrinding process.
4. The laser markable tape of claim 2, wherein said first outermost adhesive layer is cured upon exposure to said electro-magnetic radiation source, to thereby attach said first outermost adhesive layer to said at least a portion of said surface of said bare semiconductor die.
5. The laser markable tape of claim 4, wherein said curing of said first outermost adhesive layer results in a loss of adhesion between said first outermost adhesive layer and said second adhesive layer.
6. The laser markable tape of claim 4, wherein said curing of said first outermost adhesive layer forms a substantially homogenous surface over said at least a portion of said surface of said bare semiconductor die suitable for laser marking.

7. The laser markable tape of claim 3, wherein said second adhesive layer is cured by exposure to an electro-magnetic radiation source.

8. The laser markable tape of claim 1, wherein said tape comprises a flexible film material having translucent properties.

9. A tape for use in the laser marking of a semiconductor device comprising:
a flexible film material; and
a multi-layer adhesive including:
a first outermost adhesive layer comprising a mixture of electro-magnetic radiation-curable components for providing a mark on a laser markable surface upon exposure to electro-magnetic radiation; and
a second adhesive layer disposed between said flexible film and said first outermost adhesive layer.

10. The tape of claim 9, wherein said tape includes a tape for adhering to at least a portion of a surface of a bare semiconductor die.

11. The tape of claim 10, wherein said tape includes a tape for adhering to a portion of a surface of a bare semiconductor die after the backgrinding of the portion of the surface.

12. The tape of claim 10, wherein said first outermost adhesive layer includes a layer for curing upon exposure to a source of electro-magnetic radiation for attaching said first outermost adhesive layer to said at least a portion of a surface of a bare semiconductor die.

13. The tape of claim 12, wherein said curing of said first outermost adhesive layer provides a loss of adhesion between said first outermost adhesive layer and said second adhesive layer.

14. The tape of claim 12, wherein said curing of said first outermost adhesive layer forms a substantially homogenous surface over said at least a portion of a surface of a bare semiconductor die suitable for providing a mark by laser marking.

15. The tape of claim 11, wherein said second adhesive layer is cured by exposure to electro-magnetic radiation.

16. The tape of claim 9, wherein said tape comprises a flexible film material having translucent properties.

17. A tape for use in the marking of a semiconductor device comprising:
film material; and
at least two layers of adhesive including:

a first outermost adhesive layer comprising a mixture of electro-magnetic radiation-curable components for providing a mark on a surface upon exposure to electro-magnetic radiation; and

a second adhesive layer disposed between said film material and said first outermost adhesive layer.

18. The tape of claim 17, wherein said tape includes a tape for adhering to at least a portion of a surface of a bare semiconductor die.

19. The tape of claim 18, wherein said tape includes a tape for adhering to a portion of a surface of a bare semiconductor die after a backgrinding process.

20. The tape of claim 18, wherein said first outermost adhesive layer includes a layer for curing upon exposure to electro-magnetic radiation for attaching said first outermost adhesive layer to said at least a portion of a surface of a bare semiconductor die.

21. The tape of claim 20, wherein said curing of said first outermost adhesive layer provides a loss of adhesion between said first outermost adhesive layer and said second adhesive layer.

22. The tape of claim 20, wherein said curing of said first outermost adhesive layer forms a substantially homogenous surface over said at least a portion of a surface of a bare semiconductor die suitable for laser marking for forming a mark on the surface of a bare semiconductor die.

23. The tape of claim 19, wherein said second adhesive layer includes a layer cured by exposure to electro-magnetic radiation.

24. The tape of claim 17, wherein said tape comprises a film material having translucent properties.